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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,892	09/25/2003	Toshihiko Shimizu	Q77479	2235
23373	7590	12/18/2007		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER NEGRON, WANDA M	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 12/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/669,892	Applicant(s) SHIMIZU ET AL.	
	Examiner Wanda M. Negrón	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata (JP Application Publication No. 2000-131521).

Regarding **claim 1**, in figure 6 Hirata discloses a lens, i.e. image pick-up optical system 31, comprising an infrared ray insulating dielectric multilayer film which filters infrared rays, i.e. an acid-resistant infrared cut coat made from a dielectric of a low refractive index (see paragraphs [0062]-[0063]), and which is disposed on a substantially flat refractive surface (34a) of a plane-convex lens (34) wherein the plane-convex lens comprises a flat refractive surface on one side (side of lens 34 where 34a is formed) and a convex refractive surface on the opposite side (side of lens 34 where 34b is formed). Hirata, however, does not explicitly disclose art that the plane-convex lens is made of glass.

The concept of using glass lenses to assemble an optical system is old and well-known in the art. In addition, the concept of forming an interference film and an acid-resisting infrared-cutting coat on a glass substrate, e.g. a lens, is also well-known in the art, as evidenced by Hirata (see paragraph [0007], lines 1-4 and paragraph [0063], lines

5-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the lenses, including the plane-convex lens, comprising the optical system of Hirata made out of glass because glass would have been a suitable substrate for disposing an interference and an acid-resisting infrared-cutting films.

Regarding **claim 2**, Hirata teaches that the convex surface of the plane-convex lens is formed integrally on one side of the flat surface, i.e. the plane-convex lens is not a combination of two different lenses (see integral lens 34 in figure 6).

Regarding **claim 4**, Hirata reasonably discloses that the geometric center of the contour of the flat surface coincides with the optical axis of the plane-convex lens (see optical axis in figure 6).

Regarding **claim 9**, Hirata discloses a camera, i.e. image pick-up equipment 30, comprising a solid-state image sensing device (32) for converting the received light beam into an electric signal, and a lens, i.e. image pick-up optical system 31, with an infrared ray insulating dielectric multilayer film for filtering infrared rays, i.e. an acid-resistant infrared cut coat made from a dielectric of a low refractive index (see paragraphs [0062]-[0063]), disposed substantially flat refractive surface (34a) of a plane-convex lens (34) wherein the glass plane-convex lens comprises a flat refractive surface on one side (side of lens 34 where 34a is formed) and a convex refractive surface on the opposite side (side of lens 34 where 34b is formed) as the entire portion or a part of a lens system for converging a light beam received through an opening onto the solid-state image sensing device (see figure 6). It would have been inherent to

provide a housing required for covering the solid-state image sensing device from undesired light emissions, and it would also have been inherent to have an opening in order to perform an image pick up operation.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 4 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/

Examiner, Art Unit 2622
December 17, 2007

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal flourish extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER